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CONTRIBUTIONS TOWARD  
A FLORA OF NEVADA. NO. 25.



HALORAGACEAE (HALORAGIDACEAE) OF NEVADA

by

F. R. FOSBERG

January 27, 1941

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Issued by

The Division of Plant Exploration and Introduction,  
Bureau of Plant Industry,  
U. S. Department of Agriculture,  
Washington, D. C.

Work Projects Administration of Nevada,  
Projects, O. P. 65-2-04-13, W. P. 658;  
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Collaborator

University of Nevada.

Address all queries concerning this publication to the Division  
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UNITED STATES DEPARTMENT OF AGRICULTURE

WASHINGTON, D. C.

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# HALORAGACEAE (HALORAGIDACEAE) OF NEVADA

By F. R. Fosberg

Plants of wet places or (in ours) truly aquatic, usually herbaceous; leaves alternate to verticillate, entire to pinnatifid, without stipules; flowers perfect or unisexual, 2 or 4 parted; calyx very small, 2-4 lobed, or entire; petals small, 2-4 or none, separate; stamens 1-8; ovary inferior, 1-4 celled, with 1-4 styles, ovules 1 in each cell, attached apically; fruit a small nut or drupe, or breaking into 4 one-seeded nutlets.

The family name is sometimes incorrectly spelled Halorrhagaceae or Halorrhagidaceae.

Two genera of aquatics found in Nevada. They may be separated by the following key:

Submerged leaves entire - - - - - 1. Hippuris.  
Submerged leaves finely pinnatifid - - - - - 2. Myriophyllum.

## 1. HIPPURIS L.

HIPPURIS L. Gen. Pl. ed. 5: 4. 1754.

Herbs with the upper parts often extending above the surface of the water; leaves linear, entire, whorled; flowers axillary, sessile, with calyx reduced, petals absent, ovary one-celled, style one; fruit a one-seeded nut.







1. HIPPURIS VULGARIS L. Sp. Pl. 4. 1753.

Stem simple; leaves in whorls of 6-16, up to 4 cm. long, those on the emersed portion of plant somewhat reduced, bearing flowers in their axils.

Commonly called maretail.

Nevada: Washoe, Lyon, Lander, and Elko Counties, and in the Humboldt Valley "below Centerville" (acc. Watson).

2. MYRIOPHYLLUM L.

MYRIOPHYLLUM [Vaill.] L. Gen. Pl. ed, 5: 429, 1754.

Herbs, usually with the inflorescence extending above the surface of the water, leaves variously arranged, often the submerged ones finely dissected, those subtending the flowers reduced to bracts which are usually entire; flowers monoecious or polygamous, borne in spikes with the staminate uppermost; calyx with 4 lobes; petals 4 or none; stamens 4-8; ovary 4-celled, styles 4; fruit of 4 united or separating nutlets, these variously sculptured on the back.

A number of widely distributed species, almost impossible to distinguish when sterile. Only one known from Nevada.

1. MYRIOPHYLLUM SPICATUM L. var. EXALBESCENS (Fern.) Jepson, Man.

Pl. Calif. 691. 1925,

Myriophyllum exalbescens Fernald, Rhodora 21: 120. 1919.

Stem branched, with short internodes; leaves whorled,

These species, however, in some of which, as in *H. 1825*,  
occur on the narrow portion of glass, sometimes, however,  
it occurs in their cells.

*Two-leafed species.*

Species: *Hymenophyllum*, *Hymenophyllum*, and *Hymenophyllum*,  
the *Hymenophyllum* (L.) DC. 1825.

2. *HYMENOPHYLLUM* L.

*HYMENOPHYLLUM* (L.) DC. 1825. 1825.

Species, usually with the inflorescence extending above the  
surface of the water, leaves normally arranged, often the sub-  
merged ones finely dissected, those extending the leaves are  
based in pairs which are usually entire; flowers numerous at  
apices, borne in whorls with the staminate apparently single  
with a lobed, sessile & 2-lobed; stigma 2-lobed; ovary 2-lobed.  
Style 2-lobed & 2-lobed & 2-lobed & 2-lobed, those extending  
is contained on the back.

A number of finely dissected species, almost *Hymenophyllum* in  
distinction from others. Only one known from Canada.

3. *HYMENOPHYLLUM* (L.) DC. 1825. 1825.

Pl. Coll. DC. 1825.

*Hydrophyllum* (L.) DC. 1825. 1825.

From Canada, with short inflorescence; leaves simple.



finely pectinately pinnatifid; spike rather short, with whorls of flowers subtended by very small rhombic bracts, and smaller bractlets, pinkish, the flowers exceeding the bracts; stamens 8; fruit 2-3 mm. long.

The American milfoil, apparently rare in Nevada, referred by Tidestrom to M. spicatum L. and by Watson to M. verticillatum L.

Nevada: Washoe, Mineral, and Elko Counties.

